

## U.S. APPLICATION

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**Title: METHOD OF ROUTING AND DIVERTING TRAFFIC****5    FIELD OF THE INVENTION**

          This invention relates to a method of routing or diverting traffic. Moreover, this invention relates to a method of routing or diverting at least a portion of traffic from a tract of land adjacent a body of water. This invention also relates to a method of at least partially freeing a waterfront  
10    of traffic.

**BACKGROUND OF THE INVENTION**

          One problem that urban planners can face is where to locate roads leading into, for example, a city core where traffic volume can be heavy. For  
15    example, it is not uncommon to provide a road, such as a highway, through or across the city core (often elevated above the city ground). The on and off ramps of such roads, however, can become bottlenecks to traffic flow—particularly at peak hours of usage, such as, for example, morning and evening rush hours.

20           Moreover, it is not uncommon for urban centres to be located near a body of water, such as, for example, a river, or lake, or other like body of water. Providing a road, such as a highway, through the city core often means running the road through the city's waterfront area. This can lessen the visual impact of the waterfront area. Moreover, the road can have a  
25    negative environmental impact on the waterfront area as well.

**SUMMARY OF THE INVENTION**

          This invention is directed to a method of routing or diverting traffic. This invention is also directed to a method of diverting at least a portion of  
30    traffic from a tract of land adjacent a body of water. Moreover, this invention is directed to a method of at least partially freeing a waterfront of traffic. As used herein, "traffic" is defined as vehicular movement which includes, but is not limited to, automobiles and trains.

          The method of routing or diverting traffic comprises first identifying  
35    a tract of land where a road is needed. It can be appreciated that the term road as used in this application can include any way or course for the passage of traffic, such as, for example, an expressway or highway, but is

not intended to be limited to these examples. The tract of land can be any land where there is a need for a road, for example, an urban location, such as a city core or waterfront, where a high volume of traffic can occur. It can be appreciated, however, that the tract of land can include other locations  
5 such as, for example, rural or farm areas, and provincial parks or beaches, where a road is needed but, for example, the visual or environmental impact of the road on the land is not desired or is to be minimized.

The method also comprises identifying an area spaced from the tract of land suitable for supporting the road. In a preferred embodiment of the  
10 invention the area extends generally parallel to the tract of land. Moreover, in a preferred embodiment of the invention the area encompasses at least a portion of a body of water.

The road is then located through the area to span the tract of land. Moreover, the road is linked to either end of the tract of land that the road  
15 spans. It can be appreciated, however, that the road can link to the tract of land at at least one intermediate location of the road and the tract of land.

In a preferred embodiment of the invention where the area encompasses at least a portion of a body of water, the road is generally parallel to a shoreline of the body of water and the tract of land.  
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The road can be constructed using a variety of configurations and styles, for example—but not limited to—a bridge or a floating road or highway, or other suitable structures that can support traffic.

A method of routing or diverting at least a portion of traffic from a tract of land adjacent a body of water is disclosed. In particular, the method  
25 comprises locating a road offshore from the tract of land, and linking the road to either end of the tract of land. Further, the road can be linked to the tract of land at at least one intermediate location of the road and the tract of land. Moreover, in a preferred embodiment, the road is parallel to a shoreline of the body of water and the tract of land.

A method of freeing a waterfront from traffic is also disclosed. In particular, the method comprises locating a road offshore from the waterfront, and linking the road to either end of the waterfront. The road can be linked to the waterfront at at least one intermediate location of the road and the tract of land. Moreover, in a preferred embodiment, the road  
35 is parallel to a shoreline of the waterfront.

### **BRIEF DESCRIPTION OF THE DRAWING FIGURE**

For a better understanding of the present invention and to show more clearly how it would be carried into effect, reference will now be made, by way of example, to the accompanying drawing showing one preferred embodiment of the present invention, and in which:

Figure 1 is a plan view of a tract of land, and a road located offshore from the land in accordance with this invention.

### **DESCRIPTION OF THE PREFERRED EMBODIMENT**

Figure 1 illustrates, by way of example, a tract of land 10 where a road is needed or desired. It can be appreciated that the term road as used in this application can include any way or course for the passage of traffic, such as, for example, an expressway or highway, but is not intended to be limited to these examples. The tract of land 10 as illustrated in Figure 1 is an urban location, for example, a city core 12 where traffic volume can be heavy. Further, in the example illustrated, city core 12 has a waterfront 14. It can be appreciated, however, that the tract of land can be any land where a road is needed or desired. For example, rural or farm areas, and provincial parks or beaches.

The tract of land 10 illustrated in Figure 1 includes a number of roads 16 in the city core 12, including road 18, which as illustrated, is a highway that runs along waterfront 14. An arrangement of roads 16 and 18, as illustrated, can give rise to areas of heavy traffic, particularly where on and off ramps are provided, as at 20, for example. Further, these areas can become bottlenecks to traffic flow, particularly at peak hours of usage, such as, for example, morning and evening rush hours.

In accordance with this invention an alternative route is provided to rout or divert at least a portion of the flow of traffic from the tract of land, and particularly, for the example illustrated in Figure 1, from waterfront 14 of city core 12. Moreover, in certain cases the entire flow of traffic can be routed or diverted from the tract of land. This could have an added benefit of removing certain roads from the tract of land, thereby minimizing the visual or environmental impact that the roads can have on the land.

The alternative route contemplated by this invention is generally provided in an area 22 spaced from the tract of land 10. In the preferred embodiment, and as illustrated in Figure 1, the area encompasses at least a portion of a body of water 24. Moreover, the area extends generally parallel to the tract of land 10, and, for the example illustrated, runs generally parallel to waterfront 14.

A road 26 is then provided within area 22 to span the tract of land 10, and, in the embodiment illustrated in Figure 1, the waterfront 14. Road 26 is linked to the tract of land as at 28 and 30, respectively, and preferably at locations representing the ends of the tract of land that traffic is to be, at least partially, routed or diverted around. Road 26 can continue at either end 28 or 30 beyond tract of land 10 using, for example, a conventional road. Alternatively, and as illustrated in the example of Figure 1, road 26 can link to road 18 at or just beyond ends 28 or 30. Moreover, it can be appreciated, that road 26 can link to the tract of land 10 at at least one intermediate location of the road and the tract of land. For example, in Figure 1, road 26 is linked to waterfront 14 by appropriate bridges 32, 34, and 36, respectively.

In the embodiment illustrated road 26 runs generally parallel to waterfront 14. In general, area 22 is selected so that any road constructed runs generally parallel to a shoreline of the body of water and the tract of land.

Road 26 can be constructed using a variety of configurations and styles, for example—but not limited to—a bridge or a floating road or highway, or other suitable structures that can support traffic. Moreover, area 22 is generally selected for its suitability to support a road. Considerations for selecting area 22 depend, in part, on the type of road to be built through the area. For example, a bridge would require a stable shelf upon which anchor the bridge supports; a floating road could require consideration of weather patterns and the size of water swells in the area; etc.

It can be appreciated that this invention allows for at least a portion of traffic to be routed or diverted from a tract of land, and particularly by a road located offshore from the tract of land. By routing or diverting traffic offshore, relief can be provided to certain areas of heavy traffic. For the

example illustrated in Figure 1, traffic flow to the on and off ramps, as at 20, in the city core 12, can be reduced, particularly at peak hours of usage, such as, for example, morning and evening rush hours.

Further, by routing or diverting traffic offshore less roads in city core  
5 12 might be needed to handle the traffic flow. This can minimize the visual and environmental impact that the roads can have on the land, and particularly on a waterfront as illustrated in Figure 1. In its most preferred configuration, enough traffic is routed or diverted offshore through, for example, road 26, that current road 18, as illustrated in Figure 1, could be  
10 eliminated. This could free waterfront 14 of traffic flow.

It can be appreciated that variations to this invention would be readily apparent to those skilled in the art, and this invention is intended to include those alternatives.